

DEVICE AND METHODS FOR DETECTING SAMPLES IN A FLOW
CYTOMETER INDEPENDENT OF VARIATIONS IN FLUORESCENCE
POLARIZATION

ABSTRACT OF THE DISCLOSURE

5 The invention provides a sample detection
apparatus, including a polarized radiation source, flow
chamber and signal detector, the flow chamber placed to
contact polarized radiation from the polarized radiation
source, the signal detector is placed to selectively
10 detect radiation propagated from the flow chamber at
about 54.7 degrees from the direction of polarization of
the contacted polarized radiation. Also provided is a
method of detecting fluorescent intensity for a sample in
a flow cytometer independent of anisotropic radiation
15 emission. The method includes the steps of: (a)
contacting a sample in a flow cytometer with polarized
radiation; and (b) detecting radiation emitted by the
sample at about 54.7 degrees with respect to the
direction of polarization of the polarized radiation at
20 the point of sample contact.